

**HIGH-CAPACITY NANOSTRUCTURED SILICON  
AND LITHIUM ALLOYS THEREOF****Abstract of the Disclosure**

Electrodes comprising lithium alloyed with nanostructured silicon materials exhibit improved capacities, cycle lives, and/or cycling rates compared with similar electrodes made from bulk silicon. The electrodes do not require a conductive diluent such as carbon black. These electrodes are useful as anodes for secondary electrochemical cells, for example, batteries and electrochemical supercapacitors.

H:\DOCS\PTHCALTECH JPL\CTJPL.008A\SPECIFICATION CTJPL.008A.DOC  
091003